

MFJ Telescoping Whips

MFJ-1972, MFJ-1974, MFJ-1977, and MFJ-1979

Description: MFJ premium stainless-steel whips are the perfect choice for building collapsible multi-band antennas. Rigidly collared at the base, stronger than plated brass, and impervious to rust and corrosion, they stand up to the forces of nature and the rigors of portable operation where others fail. With four models to choose from, you can select the ideal length for the frequencies you need to cover:

Extension Length

MFJ-1972	extends to 4.5 feet (54")
MFJ-1974	extends to 8 feet (96")
MFJ-1977	extends to 12 feet (144")
MFJ1979	extends to 17' feet (204")

Mounting: The base of each whip features a standard 3/8-24 mounting stud for installation on the mobile or fixed-antenna mount of your choice. For 1/4-wave verticals, consider using a MFJ-342T or MFJ-344 mount. For dipoles, use two whips with the MFJ-347 Mini-Dipole Mount.

Tuning: To calculate whip extension length for a *1/4-wave vertical* or for *each leg of a 1/2-wave dipole*, use the following formula:

$$\begin{aligned}\text{Length (feet)} &= 234 / \text{Freq. MHz} \\ \text{Length (inches)} &= 2808 / \text{Freq. MHz}\end{aligned}$$

2 Meters	19-1/2"	6 Meters	55"	15 Meters	132"
Air Band	23"	10 Meters	99"	17 Meters	155"
FM Band	26"-32"	12 Meters	112-3/4"	20 Meters	199"

Optimum length may vary slightly because of surrounding obstructions, height above ground, and the type of mount being used. Adjust element tips for lowest SWR as needed.

Installation: Elements may be oriented vertically or horizontally to achieve desired polarization. For best results, coax feedline should exit at a right angle to the element. Whips are highly flexible when extended, so use caution and wear eye protection while assembling and tuning. Also, avoid installing where humans or pets may come into contact energized elements.

Important Warning: *These antenna elements are un-insulated electrical conductors. Never assemble or set up in the vicinity of electrical power lines or near electrical equipment where lethal voltages may be present!*